YourSteel™

AutoCAD®Add-in developed by YourSpreadsheets™

USER'S GUIDE

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CONTENT

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Chapter I: GENERAL

About

YourSteel™ is an Add-in that runs inside AutoCAD®, adding powerful command features to help you draw simple and complex steelwork frames and details efficiently.

User inserts Steel Sections from YourSteel™ library to AutoCAD® drawing using pickpoints. Steel members are drawn as lines by 2 pickpoints. All created drawing objects are either blocks or dynamic blocks. Once steel members are inserted, you can edit these using powerful editing commands located on Tools Palette.

YourSteel™ includes advanced automation techniques for modifying dynamic blocks. This means that you can easily manage your drawings and quickly finalize your details. The below example was fully created using YourSteel™ (this includes any alignment, rotation etc):
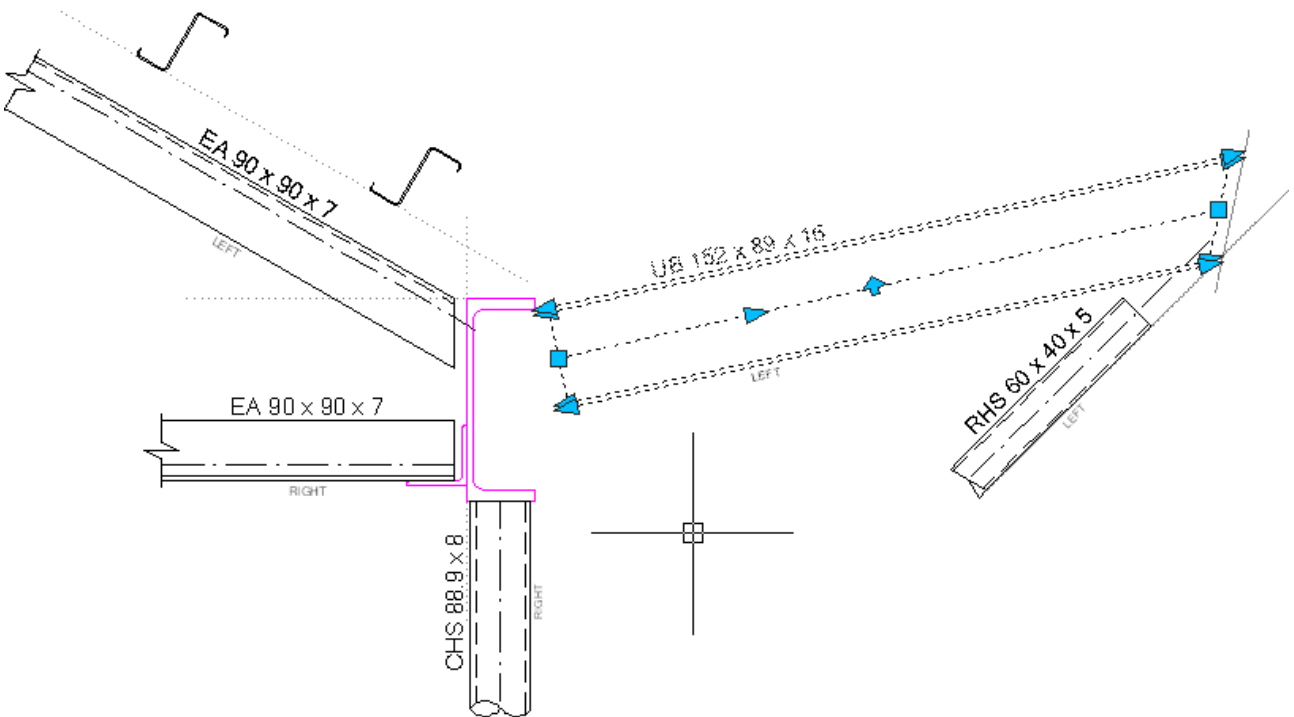
Sample drawing created by YourSteel™ objects and commands

Installation

System Requirements:

1. Windows® XP, Windows®7 or Windows® 8; 32-bit or 64-bit Operating System.
2. AutoCAD® version 2007 up to 2014.
3. About 7Mb on your drive where YourSteel™ is to be installed.
4. Ideally in Win32 OS, AutoCAD® VBA should be installed – this gives better performance by enabled floating windows.

Install YourSteel™

1. Download the latest installer here: www.YourSpreadsheets.co.uk/YourSteel.html

2. Close all running AutoCAD® sessions.

3. Start the installer. You'll be asked for User Acount Control permission or Admin password.

4. Click Yes and follow on-screen instructions. Default installation folder is C:\Program Files\Autodesk\ApplicationPlugins\YourCAD.bundle.

YourSteel and YourCAD Utility ribbons

For AutoCAD version from 2012 to 2014, just open AutoCAD and ribbons will be shown under Plug-ins tabs. If they are not, please check APPAUTOLOAD command and set the value to 14. Turn Plug-ins tab on if it is off.

For AutoCAD version from 2007 to 2011, APPAUTOLOAD has not yet implemented. YourSteel™ will add its StartUp.lsp file to AutoCAD Startup Suite of current user only. If you open AutoCAD as other user, you have to add the StartUp lisp manually following the instruction provided in APPENDIX, FAQ section.

After installation, YourSteel™ will place a shortcut of YourCAD.exe application on your Windows® desktop, and it will start YourSteel.exe application.

YourSteel.exe application helps you view and manage the Steel Section Library without opening AutoCAD®. For information about YourCAD.exe application, see Appendix.

You can also open Windows Start Menu \YourCAD folder to browse for these two applications.

Uninstall YourSteel™

If you need to uninstall YourSteel™, you should use Uninstall shortcut from Windows Start Menu\YourCAD\YourSteel or you can go to Control Panel\Add or Remove Programs\Change or Remove Programs\YourSteel and click Remove button (Window XP).

Note on Win64 issue: See Appendix, FAQ for details

Activate your license

YourSteel™ trial license is limited to 30 minutes running time which restarts each time AutoCAD® is restarted. It is also limited to drawing file size of maximum 500 objects. Once the above limitations are reached, some features are disabled until the software is fully activated.

Click "Activate" button in YourSteel™ window, or "Your license" button in YourCAD™ window to open the Activation Form. Follow the on-screen instructions to request activation of YourSteel™ on your computer. Detail information can be found on our website at: www.YourSpreadsheets.co.uk/YourSteel.html

Name conventions used in this manual

- **Steel Section (or Section)** : refers to member's cross-section shape, in the Database or in AutoCAD® as inserted block.
- **Steel Frame (or Frame)** : refers to a dynamic block of a member in side view (left, top, etc).
- **Steel Object**: refers to Steel Section or Steel Frame.
- **Database**: refer to defined Steel Sections saved as text file in YourSteel™ library folder; or in your 'opening drawing' folder (local Database)
- **Command**: refer to a command text entered at AutoCAD® command line, or to an action button on a dialog window.
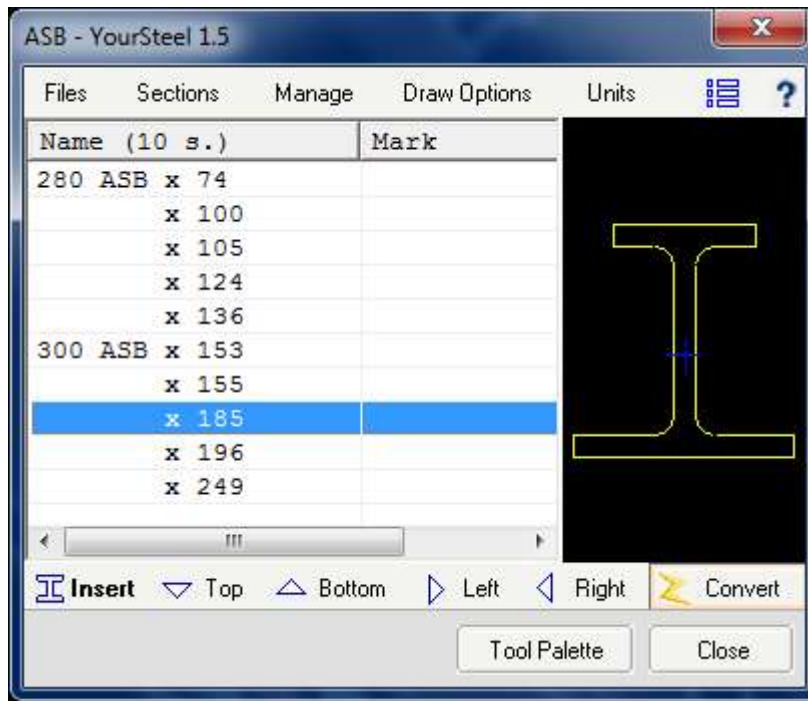
Getting Start

At first time running, a Quick Start window will show to help you select your sections database preference. You can reopen this window anytime by click to the Help button on Draw or Tool Palette.

YourSteel™ Quick Start window

The main working flow of YourSteel™ is as following:

1. Firstly, run **"YS"** command which brings up YourSteel™ window:

Using commands on Draw Palette, you can:

- insert new sections and draw new frames;
- open Tool Palette to edit already inserted sections and frames;
- access to Steel Sections Library (UK, EU, US and Australian sections are covered).

2. Use **ED** (YcEdit) command to change inserted sections and frames.

3. Use **YSC** (shortcut of YSTEELCHAN GE), **YST** (shortcut of YSTEELTOOLS), YcMatch, YcExplode, YcOffsetMove in combination with AutoCAD commands to create steel details.

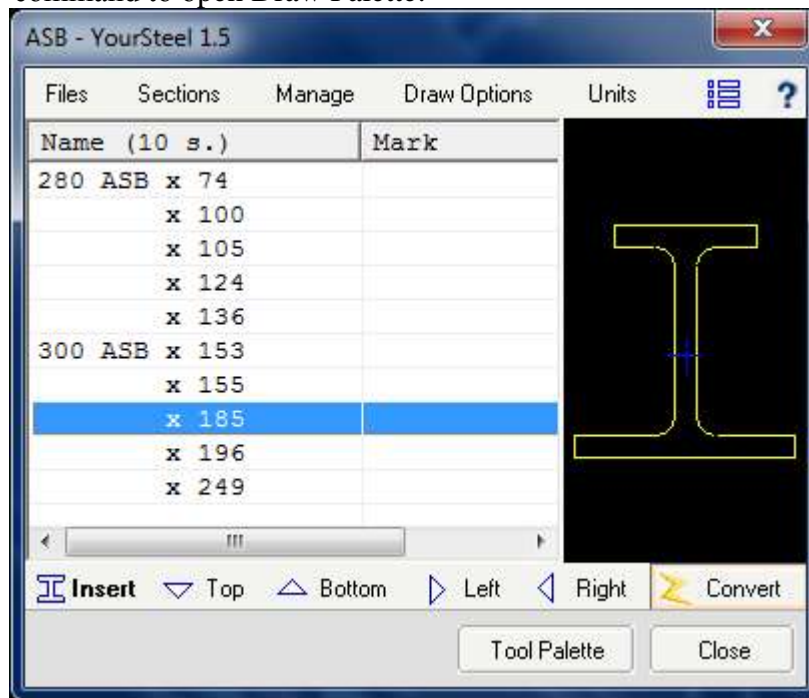4. Use **UP** (YcUpdate) command to adjust texts on Steel Frames to current dimension.

To manage plugins in YourCAD™ package including your licenses, type **"YC"** command which will brings up YourCAD™ window. See Appendix > YourCAD™ Control Panel.
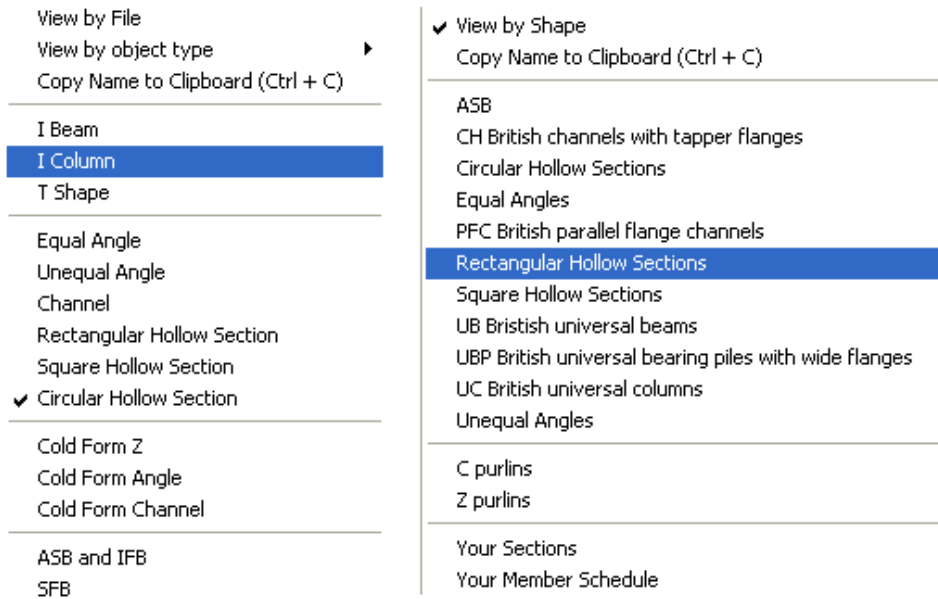
Chapter II: DRAW PALETTE

Draw Palette

1. Start

- Type in "YS" command to open Draw Palette:

- Press F1 anywhere to open immediate help page.
- Right click on the list view to bring up a selection window with various Steel Section categories. Two methods are used to categorize sections: "By Shape" and "By File". See "**8.Sections**" for more information.

- Once in the Steel Sections list in the Draw Palette you can:
- press Ctrl + C to copy the section's name to clipboard;
- double click, or press Space key, or press Enter key to run the command shown bold on the command row below;
- press Esc key to close the palette.
- click to Name or Mark column header to extend column
- right click to the preview picture to choose Copy Picture to clipboard command.

View by File	✔ View by Shape
View by object type ▶	Copy Name to Clipboard (Ctrl + C)
Copy Name to Clipboard (Ctrl + C)	
	ASB
I Beam	CH British channels with tapper flanges
I Column	Circular Hollow Sections
T Shape	Equal Angles
	PFC British parallel flange channels
Equal Angle	**Rectangular Hollow Sections**
Unequal Angle	Square Hollow Sections
Channel	UB Bristish universal beams
Rectangular Hollow Section	UBP British universal bearing piles with wide flanges
Square Hollow Section	UC British universal columns
✔ Circular Hollow Section	Unequal Angles
Cold Form Z	C purlins
Cold Form Angle	Z purlins
Cold Form Channel	
	Your Sections
ASB and IFB	Your Member Schedule
SFB	

Right click pop-up menu to select sections category

2. Insert command � Insert

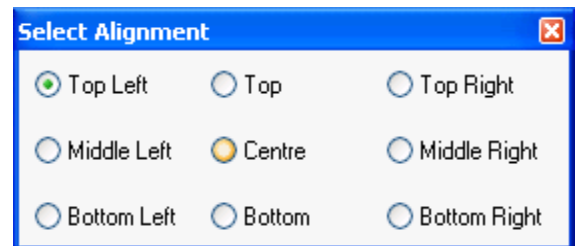Inserted Steel Sections and Steel Frames are always drawn to 1:1 scale, according to your current unit setting.

For example, if a PFC is 200mm deep then once inserted it would appear as 200 units where drawing units are set to millimeters or 7.87 units where drawing units are set to inches.

In the Draw Palette click "Units" button to see what units are used in your current drawing.

Once selected Steel Section is inserted you have four options to align it:
[Undo\Rotate\Flip\Align]

- Type U to Undo the action;
- Type R to rotate the section
  (you will be prompt to specify rotation angle);
- Type F to flip (mirror) the Steel Section;
- Type A to select other alignment.

Select Alignment

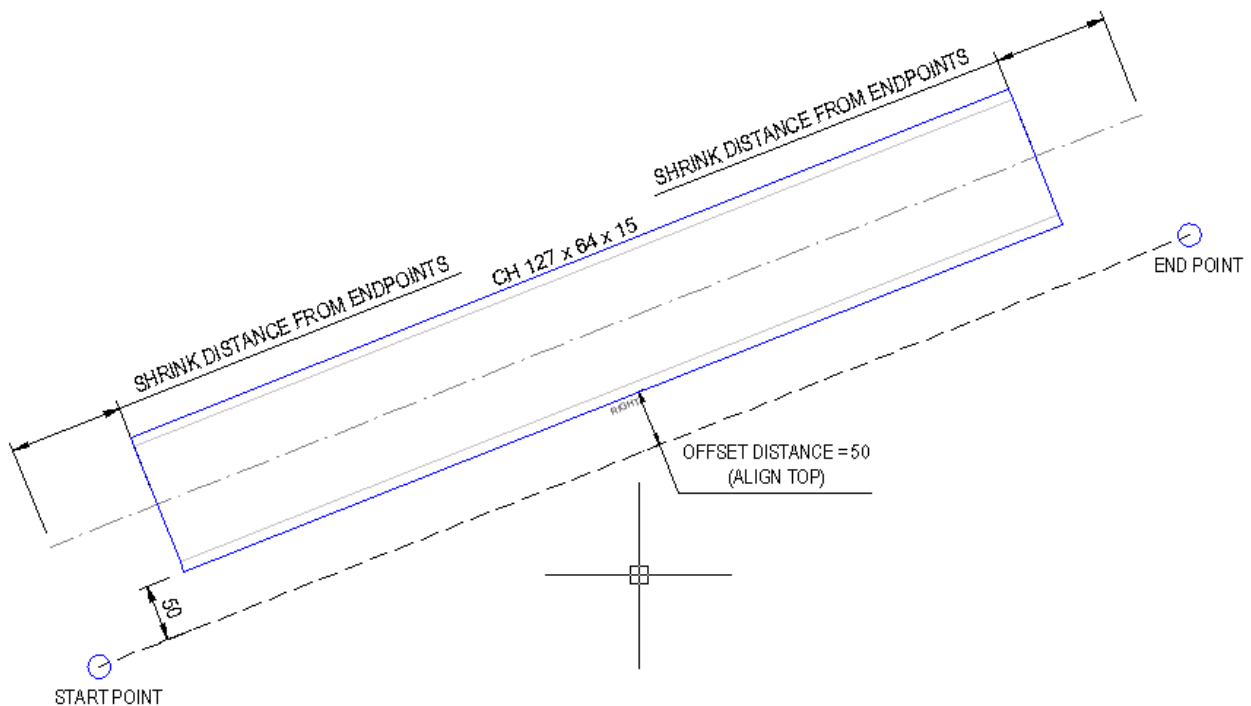| ⦿ Top Left | ○ Top | ○ Top Right |
| ○ Middle Left | ◐ Centre | ○ Middle Right |
| ○ Bottom Left | ○ Bottom | ○ Bottom Right |

Note: Like Text object, alignment is saved in inserted section. This means when you change the section size (using ED command), the relative position remains unchanged.
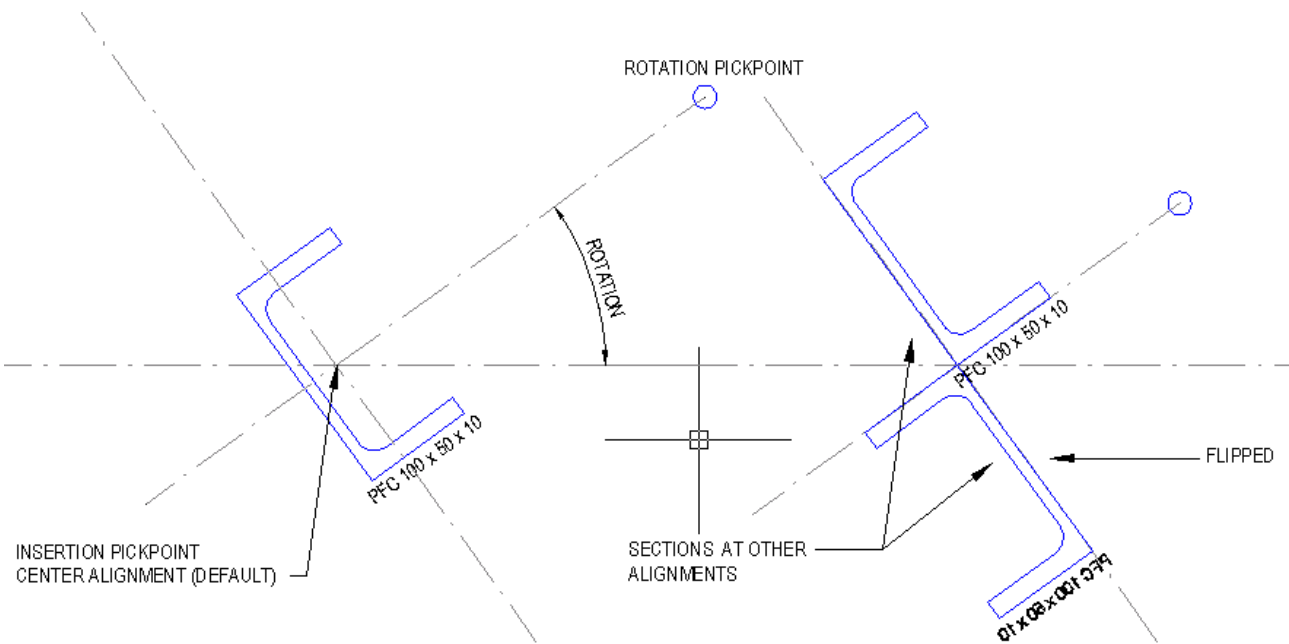
Insert Section Command

3. Draw Steel Frame in Top, Bottom, Left or Right view

Steel Frame is a dynamic block. You insert it by specifying a start point and an end point. Then you have the following options of [Undo/Visibilities/Flip/Align/Offset = …] to continue:

- Type U to undo the insert action;

- Type V to open Draw Options window and change the visibilities of being inserted frames. See **Draw Options** .
- Type F to flip (mirror) the frame by its center line;
- Type A to toggle through alignments. There are three options: Center, Top and Bottom;
- Type O to specify the offset distance from the alignment line (you will be prompt to specify offset distance).

Note: Alignment is saved in inserted frame. This means when you change the section size (using ED command), the relative position will retains.

4. Draw Options

On Draw Palette, click to Draw Options menu will bring up the Draw Steel Frame Options dialog window, which will change the way Steel Frames drawn. You can also access this setting window by type V(isibilities) while draw command is running.
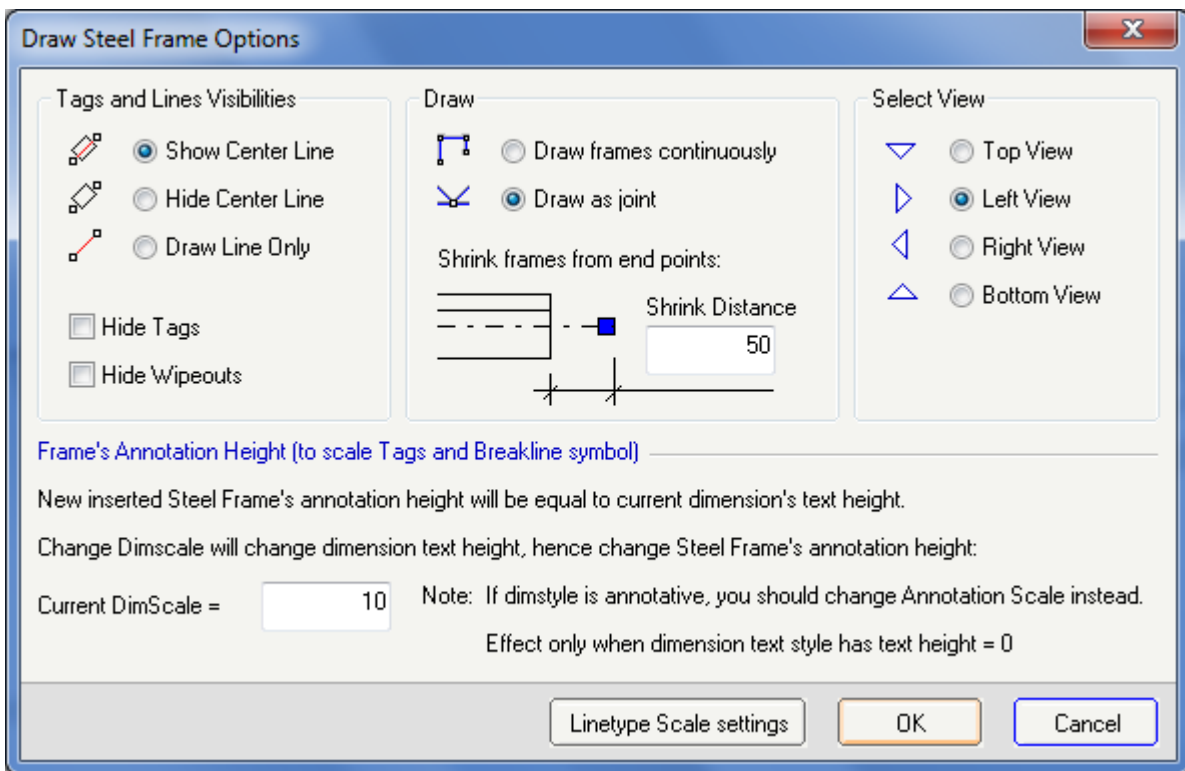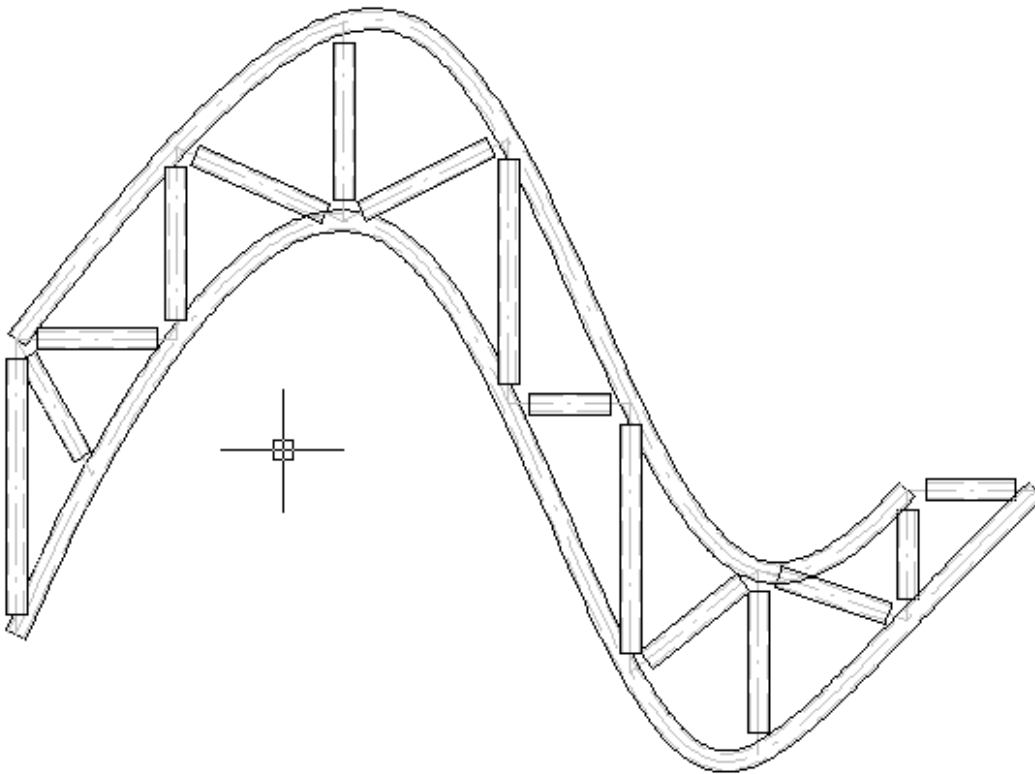

Draw Options window
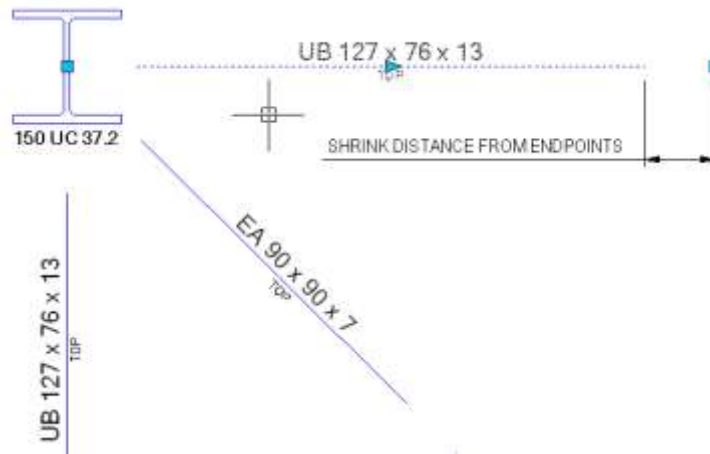
Example of Steel Frames drawn in Line Only Mode

5. Convert command   Convert

This command will convert selected lines, arcs, polylines, circles, ellipses or splines to Steel Frames. The frames visibilities are also managed by Draw Steel Frame Options.

Single lines will be converted to Steel Frame dynamic blocks. Other objects will be converted to frames composed of objects of the same type. Note that shrink distance is available with lines objects only.

Similar to Draw commands, after conversion, you can change Visibilities, Flip, or toggle Alignment of frames.

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6. Tabulate Your Steel™ Sections and Frames

(In version 1.2, this command named as Test Your Steel)

If you are a new user of YourSteel™ (or would like to create a local database of sections for later use) then this command will help you. Test command is always available in trial license.

Click to   button to run the command. You will be asked to select one or multiple Sections.

Click OK, choose an empty space in your drawing, then specify the insertion point. YourSteel™ will insert all the selected sections and frames (consisting of four elevation views) in a tabulated form.
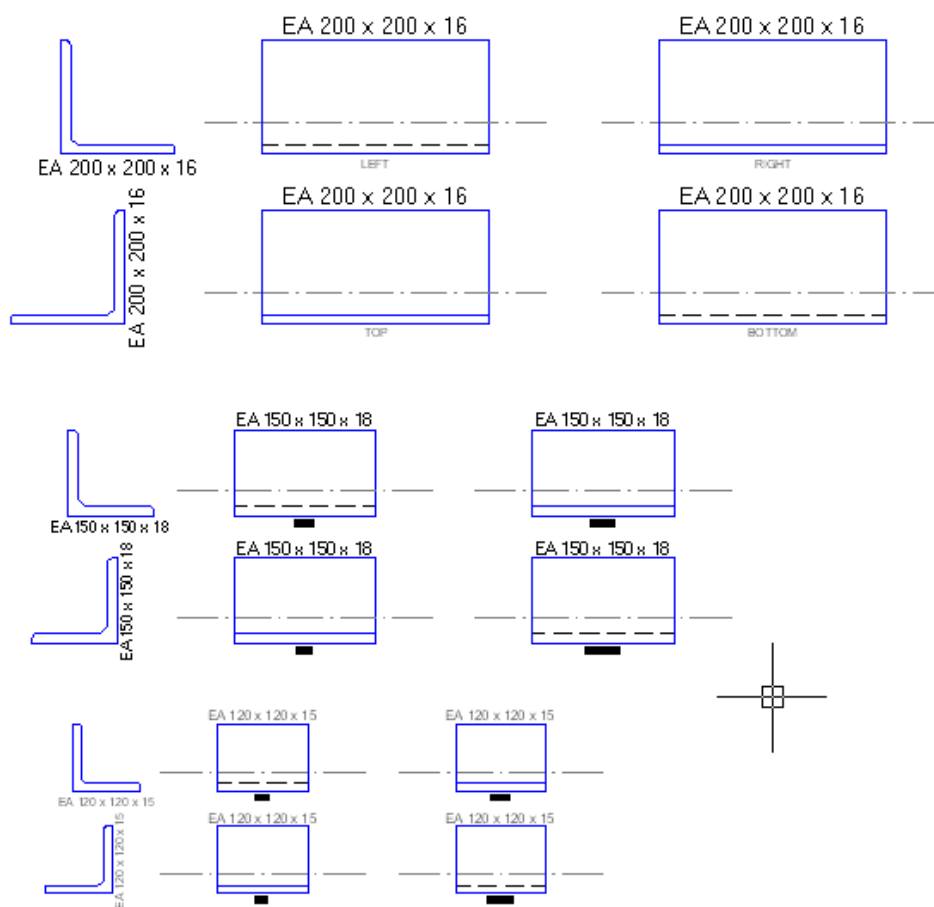
Tabulate YourSteel Sections and Frames

7. **Files** *(for switching between different Steel Sections database)*

Click "Files" button to open Settings dialog window, Files tab:
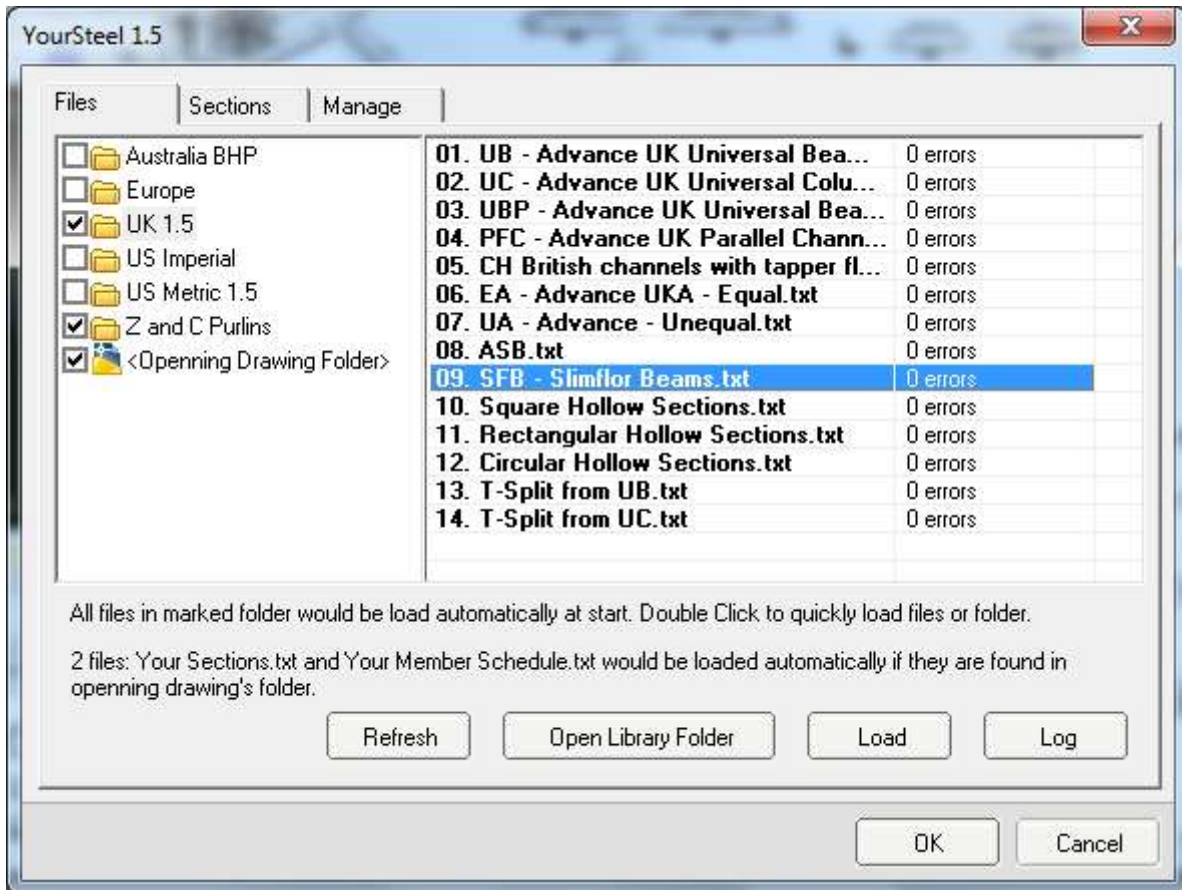
Section database folders are listed in the left panel. Marked folders are loaded automatically at application start up as default database. You can double click on folder to load it manually.

Database files in a selected folder are listed in the right panel. Double click on a file to load it. You can select multiple files and choose "Load selected file(s)" from right click popup menu.

Reinitialize

To access this command, click **Load** button → and choose Reinitialize command.

If normal load command which will adds sections to your current database, **Reinitialize** command will reset your database first, then loading your default current preference database.

8. Sections
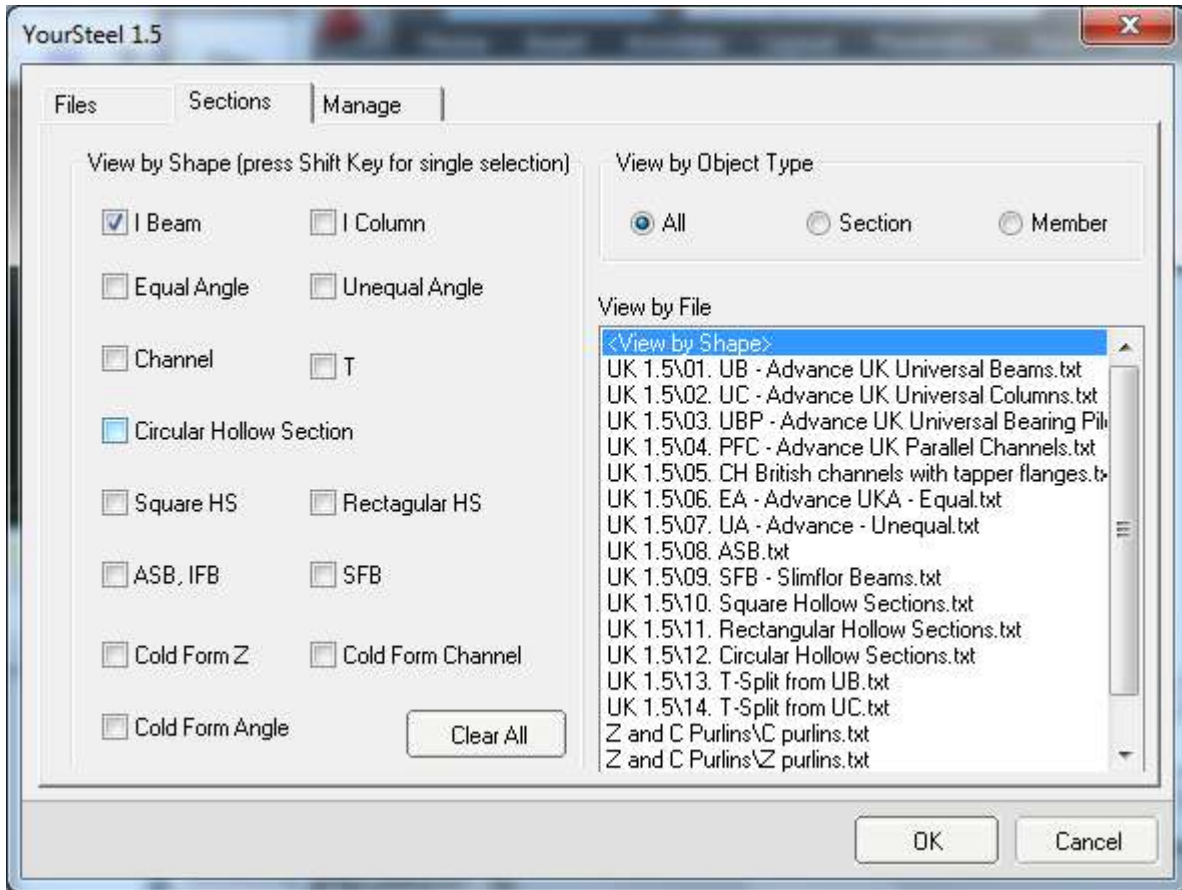
Click "Sections" button to open Steel Sections selection dialog box. Next select category you wish to show in Draw Palette and click OK.

You can also quickly access these categories via right-click popup menu.

Steel Sections are categorized in two methods: 'By Shape' and 'By File'. In 'By Shape' method, I Beam sections are taken as those whose Depth $\geq$ 1.5 Flange width. Otherwise, I shape sections are categorized as I Column.
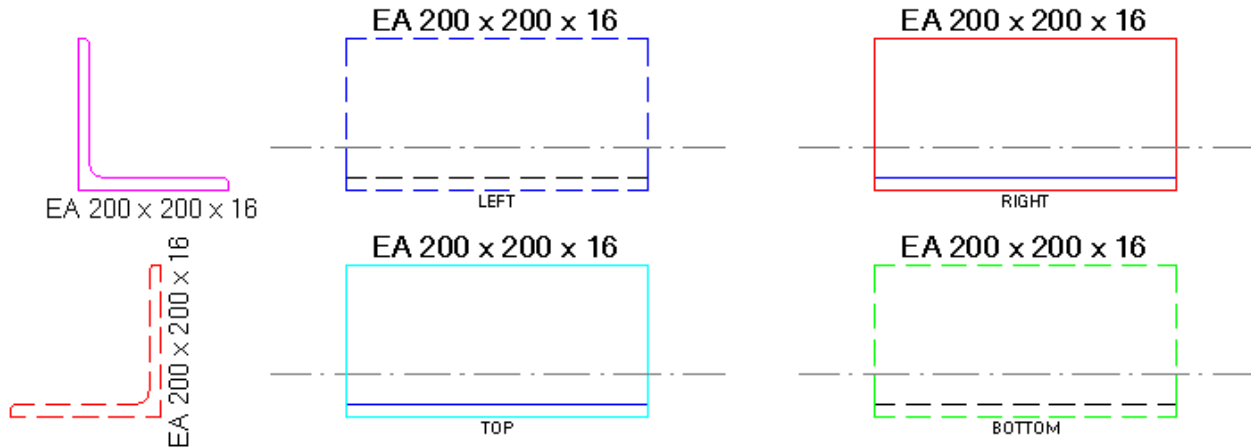
Details of Steel Objects

1. Layers, TextStyle and DimStyle

Steel objects are blocks created by lines and texts (attributes) on the following layers:

- 0
- DET_STEEL Center line
- DET_STEEL Thin line
- DET_STEEL Hidden line
- Defpoints

- DET_Steel Section Tag
- DET_Steel Frame Tag
- DET_Steel Frame View Tag
- YourCAD_Hidden: layer to place hidden objects.
- YourCAD_Wipeouts

All text are to YourCAD textstyle. YourCAD dimstyle is also imported to your drawing following the insertion of a Steel Frame.dwg.

You can change the colours and linetypes of Steel Objects by changing the layers and textstyles. This will effect all objects in drawing.

You can also "locally" change colour and linetype of selected Steel Objects through AutoCAD® native methods, e.g. the AutoCAD Properties Panel.

You can use YcExplode command to explode blocks to lines and texts, while keeping all layers, colours, linetypes and tags unaffected.

2. Steel Section

Steel Section shapes and dimensions are defined in the Database table.
(See Draw Palette, Files for more information)

Each Steel Section has two names: Name and Mark. Both should be **unique** in the Database as are used as identification keys.

Name is assumed to be the full name, whereas Mark is assumed to be a short name, or member's name (like BM1). Once you know how to create and manage your Database, you can assign Names and Marks freely.
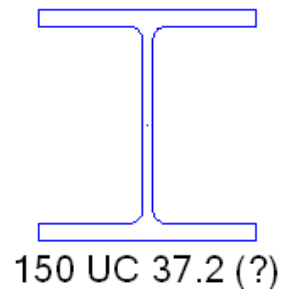
For example: In Australian BHP library, angle name 200 x 200 x26 EA is marked as EA1. Angle 200 x 200 x 20 EA is marked as EA2, and so on. Alternatively, in AISC metric library, C 75 x 6.1 name is based on metric unit. This would be marked as C 3 x 4.1 based on imperial unit.

You can tag Steel Section by either its name or mark using 'Manage' menu to open setting dialog window.

Note: if Database files are not loaded, YourSteel™ cannot recognize inserted Steel Section when editing it. Therefore Steel Object's tag would be automatically suffixed with "(?)" (image to the right). Once the Database file is loaded, use "ED"(or other tool commands) command and the suffix will be removed.

Tags in Steel Section block are constant attribute text objects and are not editable in YourSteel™ nor through AutoCAD® edit command. They are placed in layer "DET_Steel Section Tag". You can turn this layer off before printing or make it non-printable. Note that the tags are not designed to be printed, these are to help with creating drawing only.

To change a Steel Section, you can use "ED", "YsChange", "YcMatch" commands.

3. Steel Frame
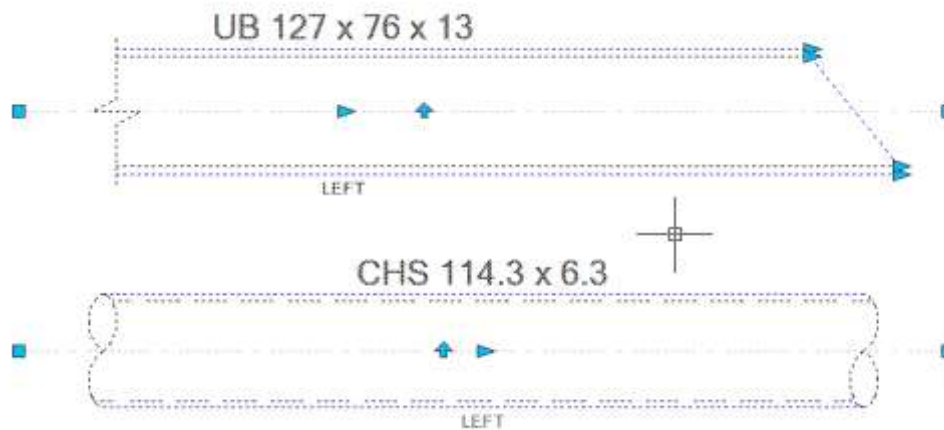
Steel Frame is a dynamic block that has four views (top, left, bottom, right) that can be easily changed. You can stretch or edit this block using grip points as shown.

Including in the Steel Frame block are three break-line symbol blocks: Break Line Symbol, Break Line Box Symbol and Break Line Pipe Symbol.

There are two tags align along the Steel Frame element. Name (or Mark) tag is place on layer "DET_Steel Frame Tag". View tag is place on "DET_STEEL View Tag" layer. These tags are normal attribute text objects. Their heights are design equal to the current dimension text height.

You can move tags along the frame using grip point.

Use "ED" or "YSChange" command to modify Steel Frame. Use Tool Palette commands to break, trim, extend or shrink Steel Frames.

Once current dimension style changes, use UP to update selected Frames Tags.

Note: While working with AutoCAD® commands, after a series of rotate, mirror or flip actions, Steel Frame may show tags upside down or backward, or no grip point found. To fix these, use "UP" command, or "ED" command (click "Select more object" to select more Steel Frames) and press OK.
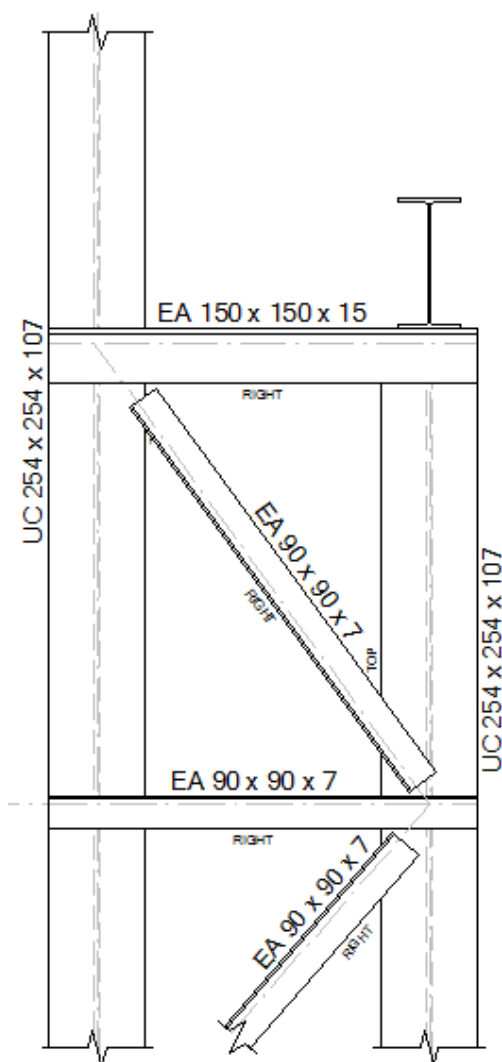
From YourSteel version 1.5, a wipeout is implemented in Steel Frame block. This will make overlapped Frames to be clipped automatically according to their drawing orders, as shown in above image.

To update this new Steel Frame block to your drawing created by old Steel Frames, open Draw Palette > Manage > Update > Update Steel Frame block.

Chapter III: EDITING COMMANDS

ED and UP commands

These are 2 main and quick commands in YourSteel working flows.

1. ED command (Edit)

Enter "ED" in AutoCAD® command line to run Edit command. You can also click to ED button on YourCAD Utility ribbon.

Note: to change the command name, go to Chapter IV: Advance Usage → "Change command names" section.

"ED" command integrates YourCAD™ edit command and AutoCAD® native command DDEDIT and ATTEDIT.

"ED" command works with Steel Sections and Steel Frames and texts, dimensions, attributes as well by calling AutoCAD® native edit command.

- Select a Steel Section on your drawing will bring up the Select Steel Section window:
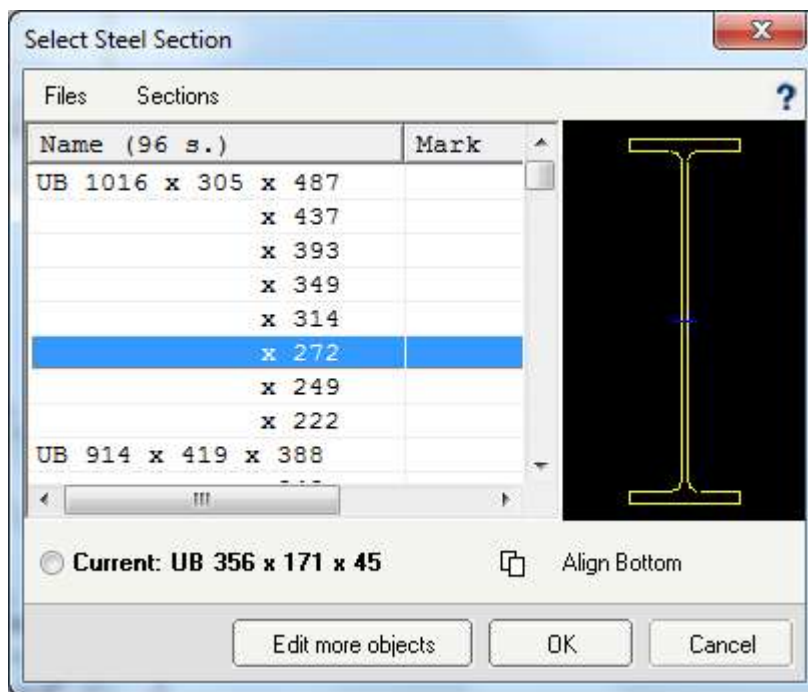

You can choose a new Section and/or change alignment. Click on "Edit more objects" command to selected more sections, and then click OK would apply change to all.

After changing section size, alignment feature keep objects retain their relative positions (see image below)
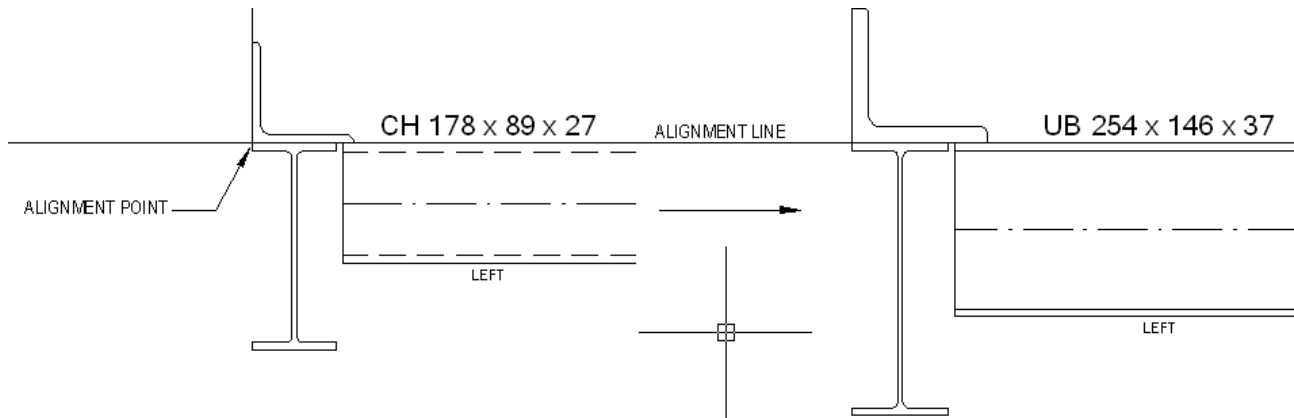
*Steel objects retain alignments after changing section size*

- Select a Steel Frame on your drawing will bring up the Edit Steel Frame window:
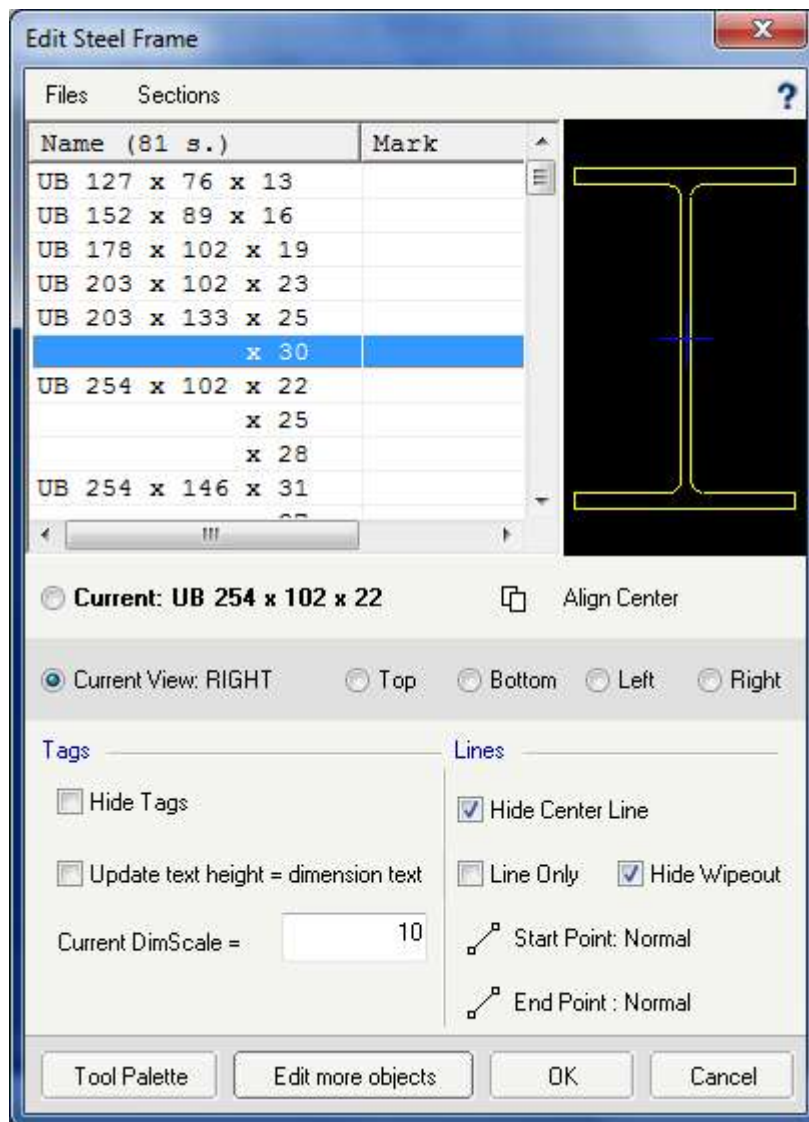
Beside changing section size and alignment, Edit Steel Frame window gives you many options to modify selected Steel Frames. Like AutoCAD® Properties palette, **you can select multiple frames by clicking "Edit more objects" button** and edit them all at once.

Each frame end's visibility can be switched to other option of: (image on the right)

- Normal Line
- Break Line
- No Line: useful when making connection drawing.
- Right Angle Cut
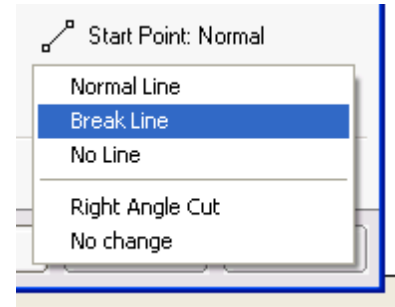
2. UP command (Update)

Enter "UP" in AutoCAD® command box to run Update command. You can also click to UP command button on YourCAD Utility ribbon.

*Note: to change the command name, go to Chapter IV: Advance Usage → "Change command names" section.*

"UP" command works with Steel Objects, AutoCAD® dimension objects and AutoCAD® blocks.

Working with Steel Objects, UP command updates tag values. With Steel Frames, this command fix tag alignment and update text height to current dimension style. If Steel Frames show show no grip points, "UP" command will fix them.

Working with other AutoCAD® objects, UP command updates selected dimension objects to current dimension style and update attributes fields in selected blocks.

Tool Palette

Enter "YST" (YSTEELTOOLS) in AutoCAD® command line to bring up the window:
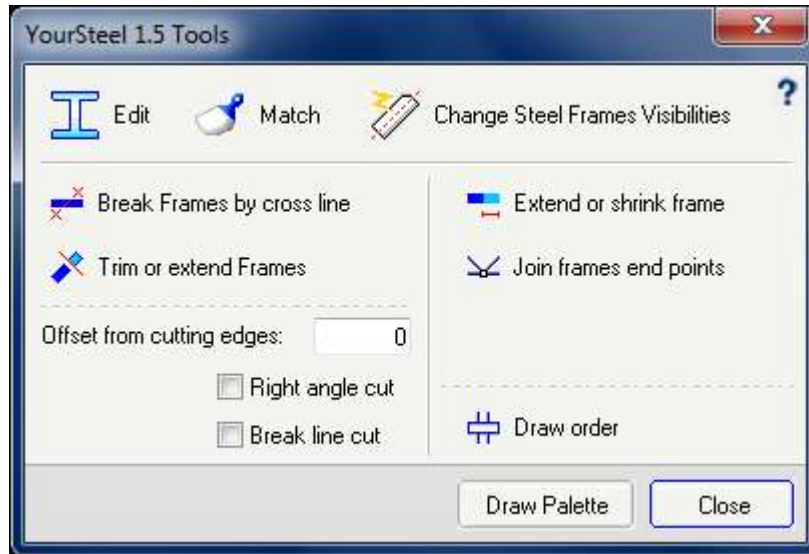
1. Edit

This command is similar to "ED" command, but it works on Steel Section and Steel Frame objects only (So it does not work with dimensions, attributes etc).
(See *"ED command"* section for more information)

2. Match Section

Match section of selected source steel object to destination steel objects. This command is similar to YsMatch command, except it will work with YourSteel objects only.

3. Change Steel Frame Visibility

This is YSC (YSTEELCHANGE) command, can be access via YourSteel ribbon.
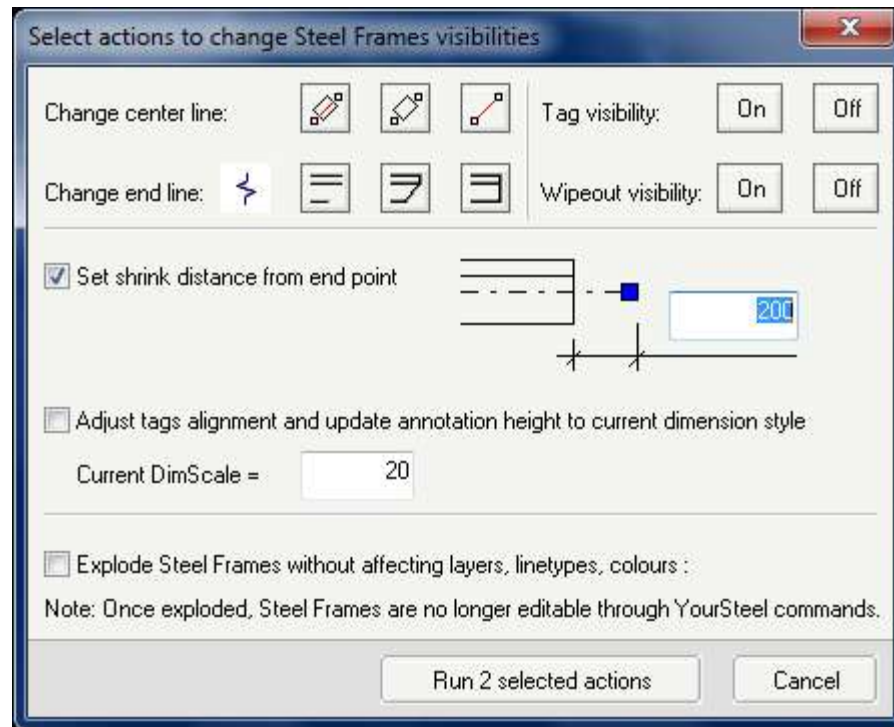
Change Steel Frames visibilities window

Various actions for you to choose to modified Frames. Action of changing end line and changing shrink distance are depended on how you select Frames. Only frame ends which are inside (or near) your selection window (or selection point) will be affected.
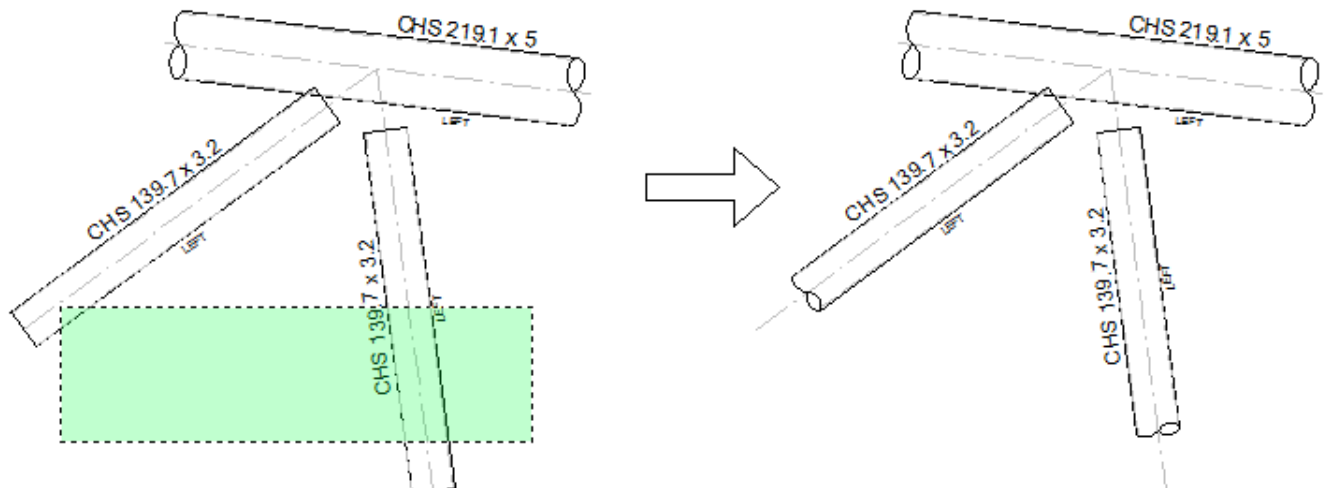

How YSteelChange command works

4. Break Frames by cross line

This command will break multiple (selected) frames based on a cutting line specified by 2 selected points.

There are three options when using Break Frame command: Right angle cut, Break line cut and Offset from cutting edges. The result varies depending on Steel Frame selected and drawn cutting line. See below for examples:
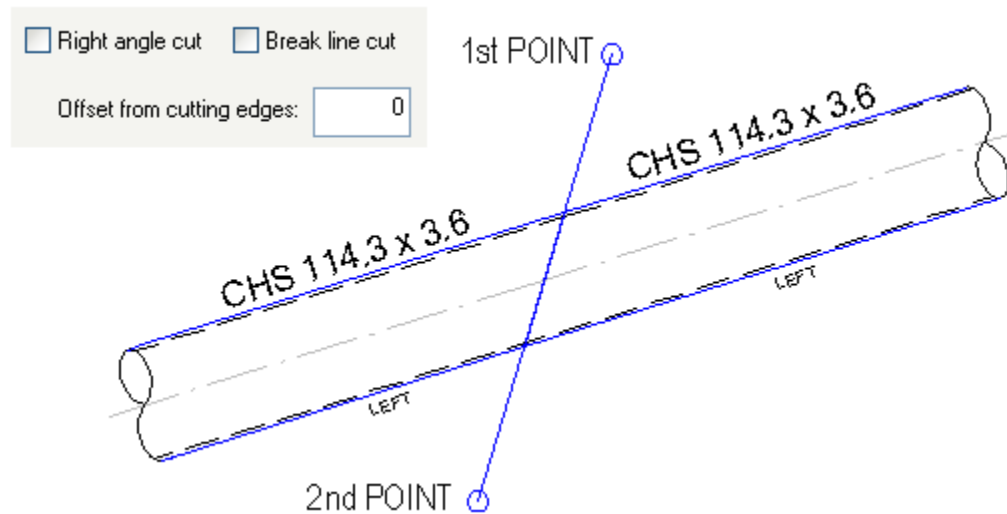
Break frame: no option selected
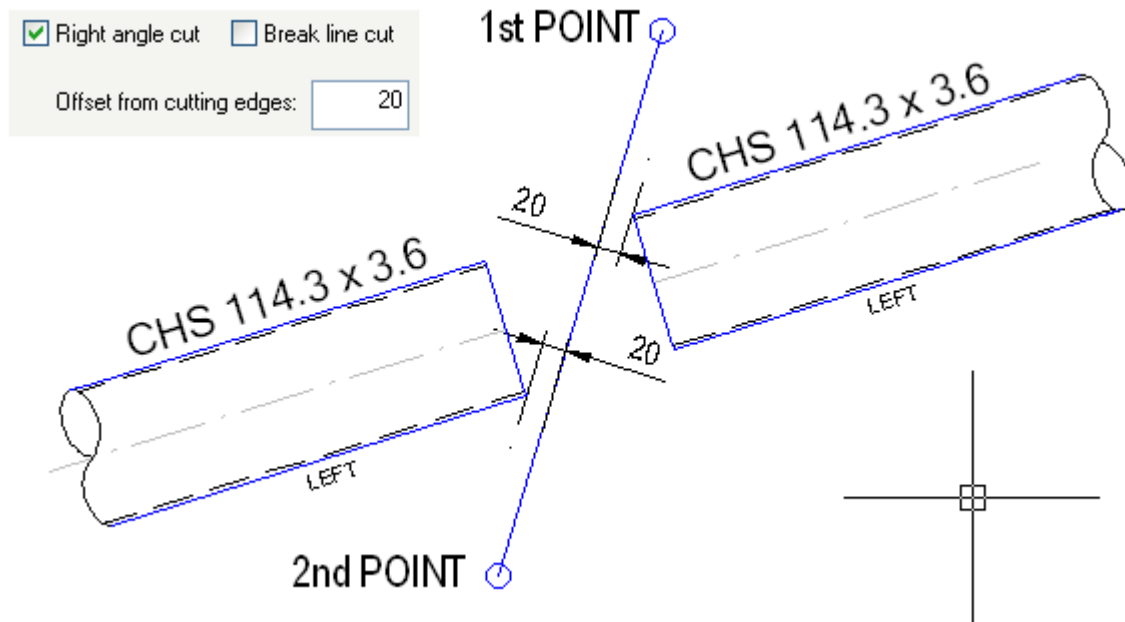
Break Steel Frame: Right angle cut with a 20mm offset distance from cutting edges
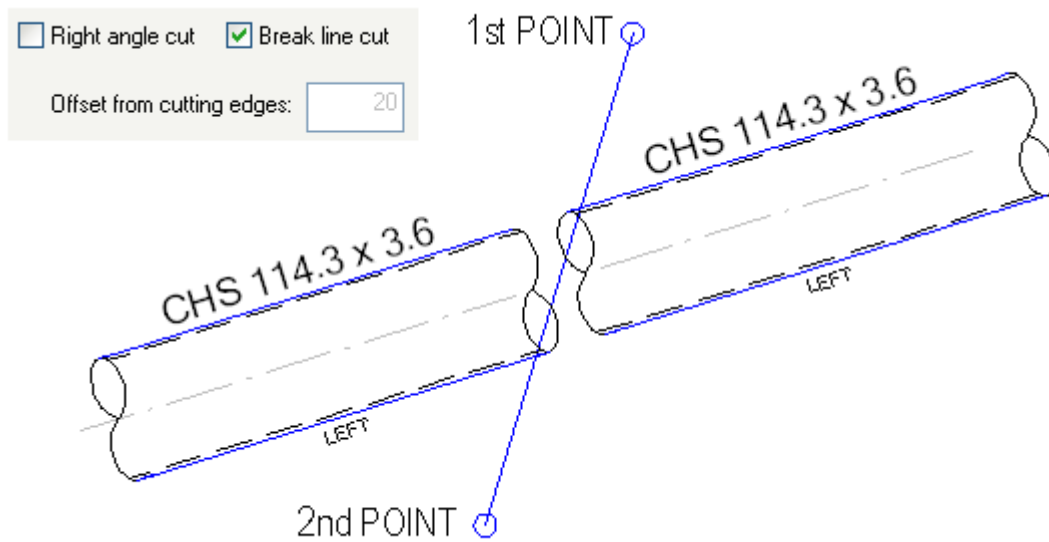
Break Steel Frame: "Break line cut" selected

Break Steel Frames when lines do not cut: "Break line cut" option will turn frame ends to break lines, while "Right angle cut" option will turn frames ends to normal lines at Right Angle.

5. Trim or extend frames

This command will prompt you to select cutting edges then select Steel Frames to trim or extend. Similar to Break command, Trim command also varies depend on selected options: Right angle cut, Break line cut and Offset from cutting edges.
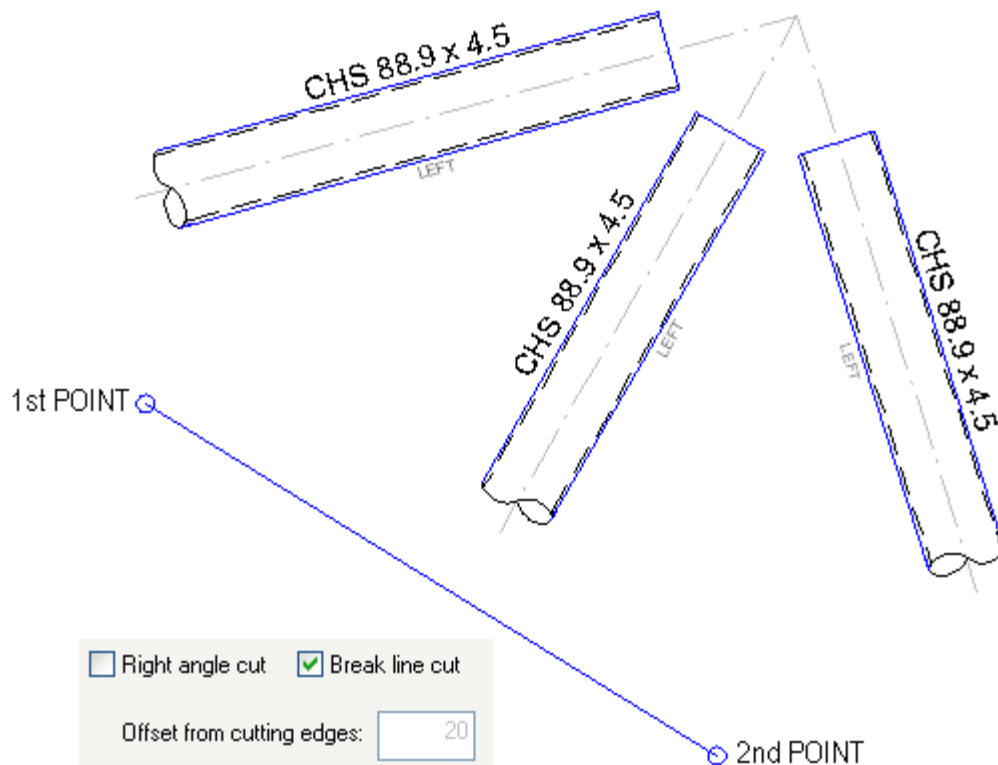
Options available while running are:

- Type "U" to undo previous action;
- Type "F" to reset offset distance to 0, or flip offset edges to the other side of the selected cutting edges. Flip is only available when offset from cutting edge is specified, and "Break line cut" is deselected.
- Press Shift key to lock the center line
- Press Ctrl key to trim/extend center line only (NEW in 1.5 version)
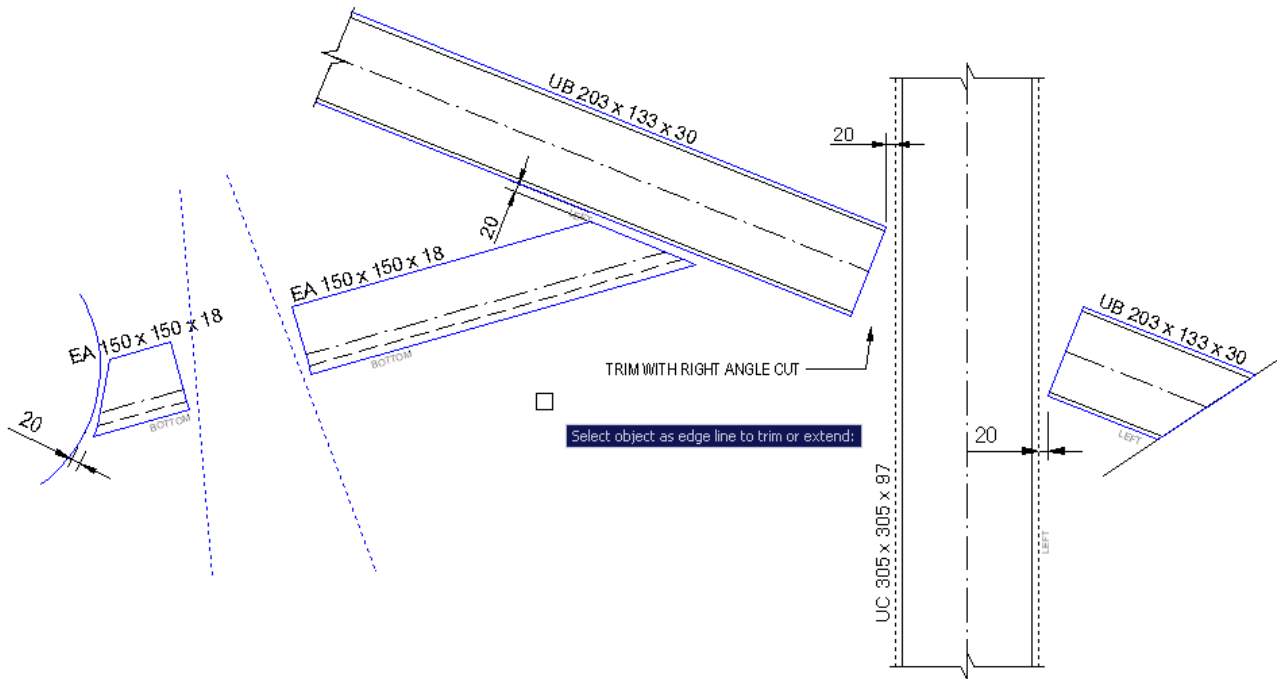
Trim command with Right angle cut and Offset from cutting edges = 20.

Notes about cutting edges:

- should be straight lines or polylines (though the commands accepts all types of object);
- should not be too close to selected offset distance;
- should not be rotated in too many directions.

If you want complex detailing, explode the frame to lines and edit with AutoCAD native commands.

6. Extend or Shrink.

If specified distance is positive, command will extend selected Steel Frame at a selected end.

If specified distance is negative, command will shrink selected Steel Frame at a selected end.

Similar to Trim command, you can hold-down Shift key to keep center line unchanged. Hold-down Ctrl key to extend center line only. These option is very useful when creating connection details.

7. Join frame end points

This command will quickly stretch selected Frames ends to join at a specified point.
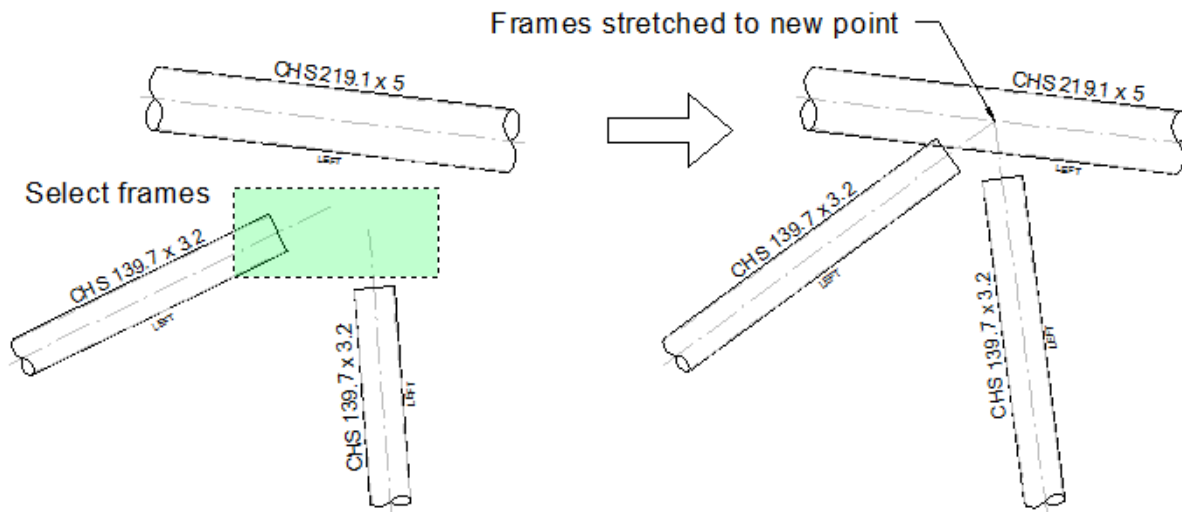
Join Frames end points command

8. Draw order

Steel frame can be shown as filled object since an AutoCAD wipeout is embedded in its definition. Beside AutoCAD DrawOrder command, this command will be useful:

- Select drawing objects in sequence which you want to show from bottom to the top

- Because your last selection will be on top, you can use a crossing window to select all the rest

- Press enter and objects will be redraw up to your specified draw order.

Manage commands
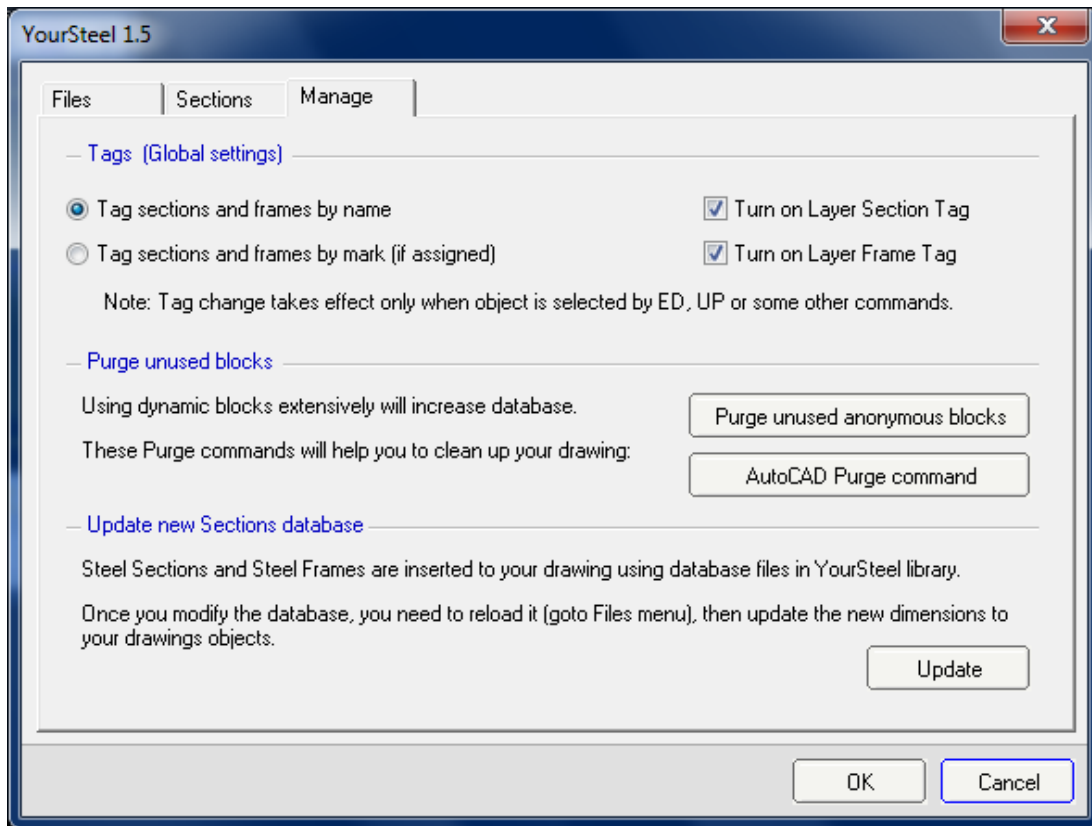
From Draw Palette, click on Manage menu to bring up the Manage window (image above).

Beside Tag Visibilities control, there are Purge commands and Update command. Purge commands will help you clean your drawing for reducing drawing file size. Update command will help you when you make changes to your database, which require update new dimension to all inserted blocks of Sections and Frames.

YourCAD Utility

These are shared commands between plugins in YourCAD™ package. They will be useful not only within YourSteel , but all other CAD drafting jobs.

1. ED (YcEdit)

See "ED and UP command"

2. Match (YcMatch)

Match YourCAD object's properties. If Steel Object selected, this will change Steel Section of all destination Steel Objects.

3. Offset Move (YcOffsetMove)

Move selected objects a specified distance from base line (or curve) to the base offset direction.

4. Explode (YcExplode)

Explode inserted blocks to lines and texts without effect the colors, layers. Attributes will be converted to texts. This is different to AutoCAD® native explode command.

5. Break line (YcBreakLine)

Draw break line with Dynamic Break Line block. You can edit these blocks easily by grip points, or through Properties panel.

Similar to Frames, you can use UP command to update the objects to current dimension text height.

6. UP (YcUpdate)

See "ED and UP command"

Chapter IV: ADVANCE USAGE

Change command names

To change YourCAD™ commands:

- Open YourCAD™ with "YC" command,
- Click on the top bar (which show the program path) to open the folder in Windows Explorer
- Open Commands.lsp to edit the text, which originally might be as follow :

;You can modify command names (text after C:)

;Once change, run YourCAD and click Reload (or Refresh if you are not in AutoCAD)

;---

(defun C:YC (/) (YourCAD_Open "")(princ))

(defun C:ED (/) (YourCAD_ED) (princ))

(defun C:UP (/) (YourCAD_UP) (princ))

If you want to change "ED" command to Your_Command, edit "C:ED" to "C:Your_Command". Command name should contain alphabet characters only.

- To change YourSteel™ "YS" command, browse to its folder where the end of the path is \YourCAD\Applications\YourSteel.
- Open Commands.lsp and edit the text "C:YS" to your command.
- In AutoCAD®, YourCAD™ window, click "Reload YourCAD".

Notes: If you are not in AutoCAD, open YourCAD.exe and click "Refresh"

Create Steel Section Database

Section shapes and symbols are introduced in APPENDIX.

You can create your own Database folder following these steps:

- Open Library Root Folder with Windows Explorer and create your folder,
- Copy a Database file with required Steel Shapes to your folder,
- Rename the Database file if required,
- Open the file with Notepad. Copy all to an empty Excel spreadsheet,
- In *SETTING section, edit unit setting field to "mm" or "inch",
- Double check the shape field,
- **Do not change "*SETTING" and "*TABLE" cell,**
- Replace the old Database with your Database. Remember your Section's name should be unique. Otherwise, they will override each other,
- Clear the text content in Notepad. Copy text content from Excel to Notepad,

- Click Save. Remember to save your file in ANSI format cause UNICODE is not currently supported,
- You don't need to close AutoCAD® or YourSteel™. Just reopen the YourSteel™ → Files and your new folder with your new Database file will appear on the list,
- Double click to load the file.

The Member and Member Schedule

In a project, you may want to tag the Sections by the member's name from a member schedule like this:

Member	Section
C1	500 WC 440
C2	350 WC 230
C3	400 WC 361
B1	PFC 200 x 75 x 23
B2	300 ASB x 249

Other than Section object, YourSteel™ has Member object type defined by two fields: Member and Section.

Member with assigned marks would be tagged as shown below:
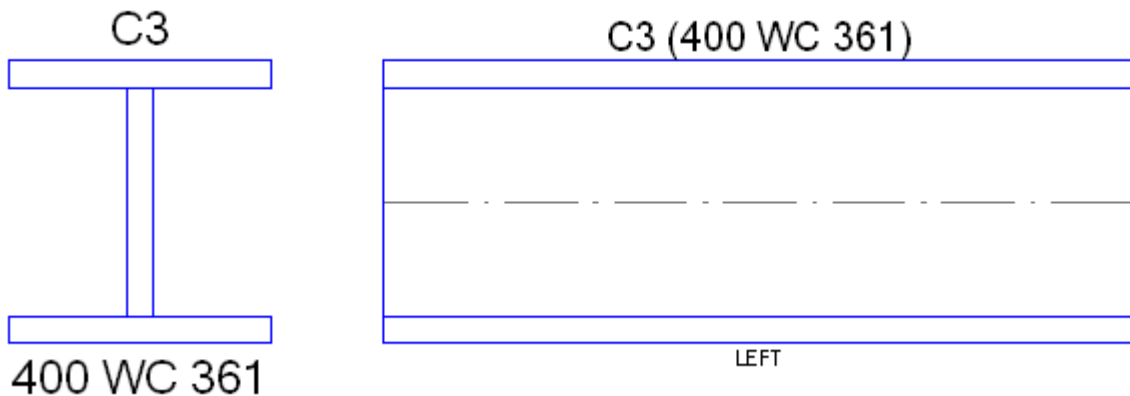
Member definition Database file should be named as *Member Schedule*.txt (where * stand for any text). YourSteel™ will recognize the file by this name syntax and load it as member schedule. The text content in member schedule Database file is a simple table with two columns separated by tab key:
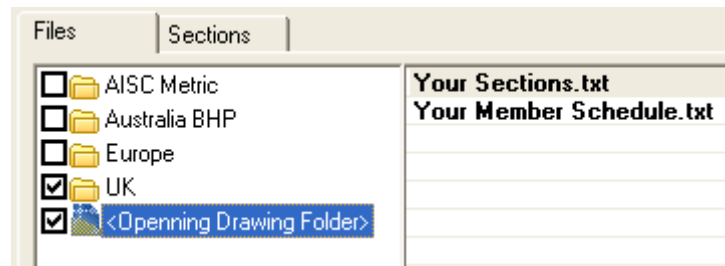
Member   Section

C1   500 WC 440

C2   350 WC 230

C3   400 WC 361

Member schedules are easy to modify, as these are expected to be modified often. Once it is modified, you should reload Database file, and run Update routine from Tool Palette. The commands can be found in *Chapter III: Editing Commands, Tool Palette, Update Section and Frames*.

Your Sections.txt and Your Member Schedule.txt files

Custom sections (usually built up sections) and member are expected to be modified often on per-project basis. YourSteels™ has a solution to this issue: other than the Database, two files: Your Sections.txt and Your Member Schedule.txt can reside in an opening drawing folder and are automatically loaded at start up (if exist).

These Database files are mark in YourSteel™ as "local" Database. Each time you open, or switch to another drawing, all local Database files of previous opened drawing will be cleared, and YourSteel™ will reload the Your Sections.txt and Your Member Schedule.txt in a new local folder (if exists).

APPENDIX

Issues and Frequently Ask Questions

YourSteel™ runs strange on AutoCAD® 64-bit

YourSteel originally is 32-bit Visual Basic 6 application. In AutoCAD 64-bit, YourSteel cannot get priority focus from AutoCAD. This means AutoCAD does not "freeze" when a modal dialog of YourSteel is active. Sometime mouse cursor over AutoCAD window disappears.

A tip to deal with this issue is quite simple: while a modal dialog of YourSteel is running, do not click, type, or pan on AutoCAD screen. Just waiting and follow the software instruction until the dialog closed.

Finally, we are working on a VB.NET version of the add-in that will work efficiently with all AutoCAD® versions.

YourSteel™ is not loaded at start up (AutoCAD 2011 and earlier issue)

You can browse to "YourCAD control panel" section at the end of this APPENDIX to see how to use APPLOAD command to manually load YourSteel. You can also double check if YourSteel "YS" command has been changed in lisp file. Go to *Chapter IV: Advance Usage, Change command names* for more information.

What does Mark of Steel Section mean ?

Mark is an alternative name of a Steel Section defined in sections database. You can open the database to modify it. In our US – Imperial database, the metric section's name is assign to Mark. In Australia sections, Mark is a polular shorter name of the section.

See *Chapter II: Details of Steel Objects* and *Chapter IV: Advance Usage* for more information.

Steel Frames do not show the grips

Dynamic Block lost all of its grips after it was scaled non-uniformly. Any differences, as small as 0.000000001, in the three (X, Y, Z) scale values would lead to this issue. Due to some error in AutoCAD, rotate and mirror command sometime shift these scales.

To restore everything back uniformly again, use "UP" command and select all Steel Frames. You can also use "ED" command, click "Select more objects" to select more frames, and click OK.

The centroid coordinates do not match with my steel dimension database

Centroid by default, if not clearly assigned, is auto calculated value by integration along the section's polyline. Any discrepancy in the dimensions would make the result different.

If you want the Centroid exactly as shown in your database, contact us. We would generate a database for you use for free of charge.

I cannot find my section in the database

You can send us your database in excel spreadsheet format. We would generate a YourSteel database to your standard. You can do it by yourself as well by studying Chapter IV: Advance Usage, Create Steel Section Database.

My layer lock status changes after running YourSteel™

Generally, YourSteel would unlock the current layer and YourSteel's Tag layers when running commands in order to edit objects.

Cannot restore AutoCAD® window by click after minimize

This is a side effect happen ony when YourSteel modal dialog is active. You can use Show Desktop command on Window Taskbar (shortcut is Ctrl+D), then click to AutoCAD icon again, then close YourSteel window.

How to install AutoCAD® VBA for Win32 OS *(if not already installed)*

VBA stands for Visual Basic for Application, designed by Microsoft® Corp. AutoCAD® VBA is a free package for developer to create add-ins to automate AutoCAD. Since VB.NET technology is to replace old Visual Basic language, VBA is no longer included in AutoCAD® installation package.
To install AutoCAD VBA, please do these following steps:
- browse to Autodesk® page via the link in the pop-up message (as above), or follow this link: Download the Microsoft Visual Basic for Applications Module
- download a compressed zip file with a VBA installer version matching your AutoCAD® version.
- close all running AutoCAD® sessions.
- unzip and run the VBA installer.

Section shapes and symbols

Shape and dimensions are specified in Database file. The centroid is automatically determined using integration calculations incase shape is not symmetric.

There are 10 shapes types:

- I (including I shape, AFB in IFB shape)
- T
- Channel
- Angle
- Box (Rectangle or Square Hollow Section)
- Pipe
- Cold Form Z
- Cold Form Angle
- Cold Form Channel
- SFB

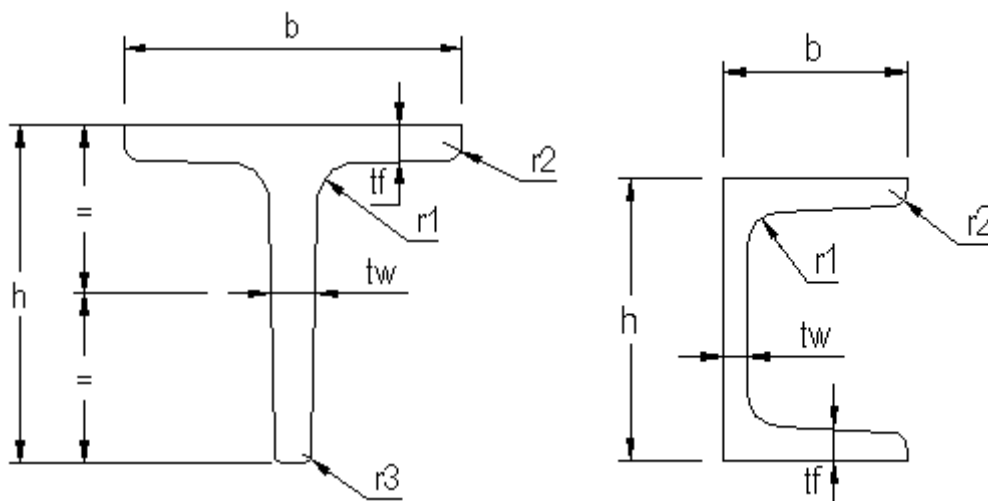Annotated drawings of every shape type are shown below:
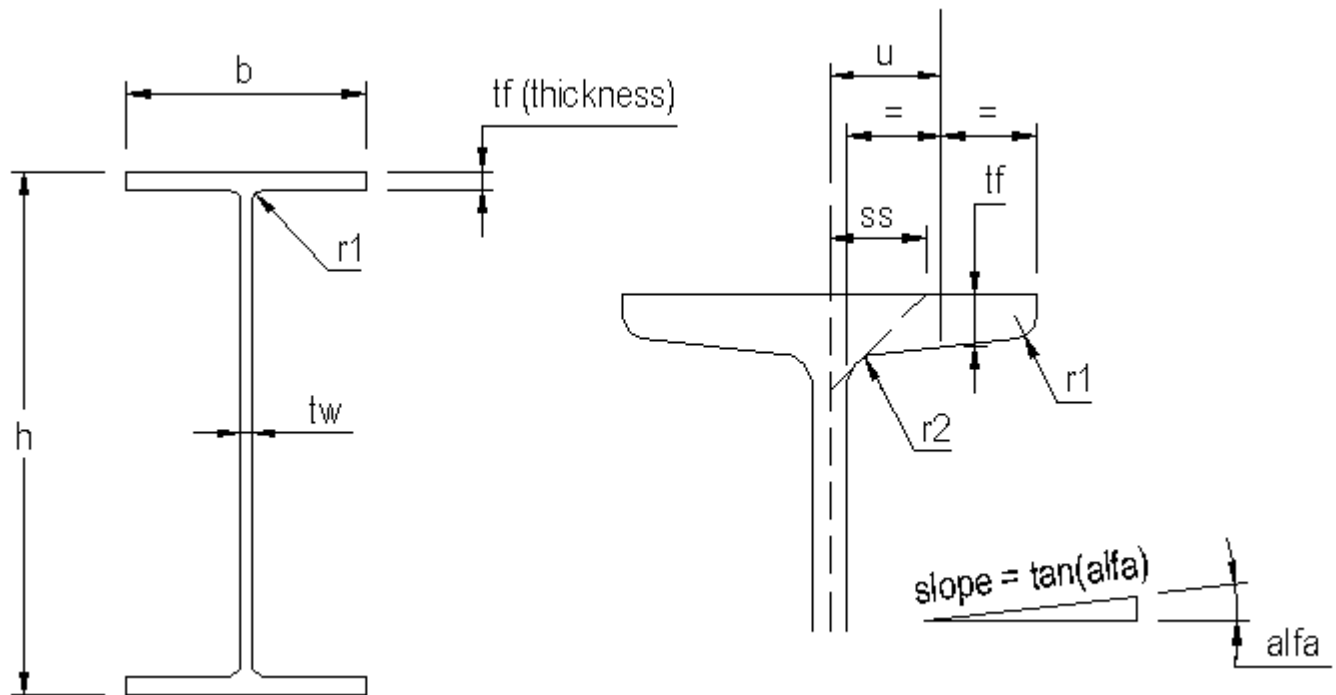
I SHAPE

Note: In tapper flange, ss, r2 and slope are parameters constrained by function. If not specified, u is assumed to be at middle of the projected flange.
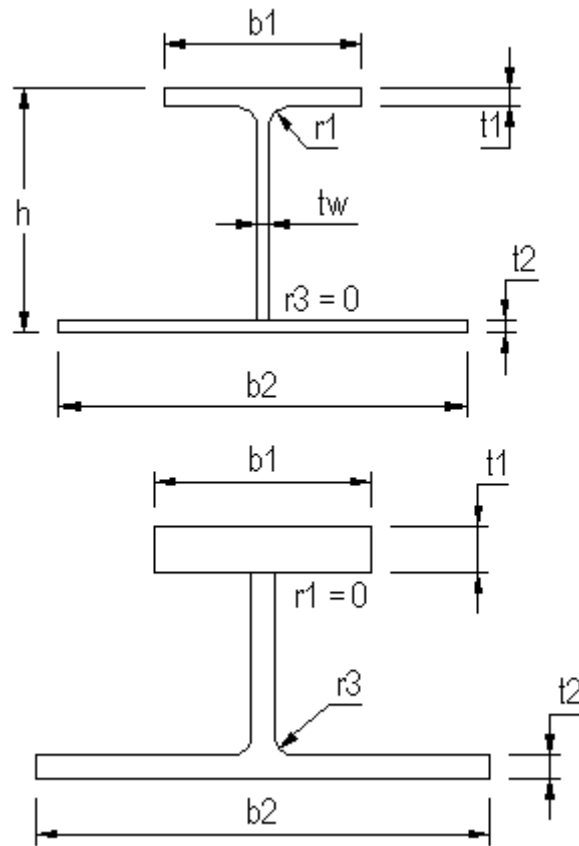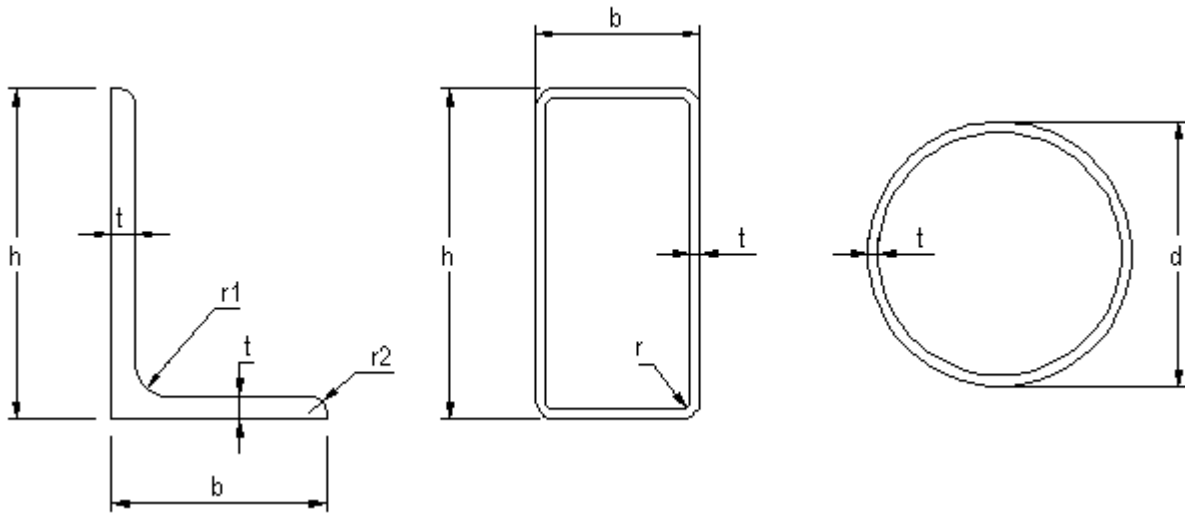
A VARIATION OF I SHAPE WHICH FORMS AFB OR IFB SECTION

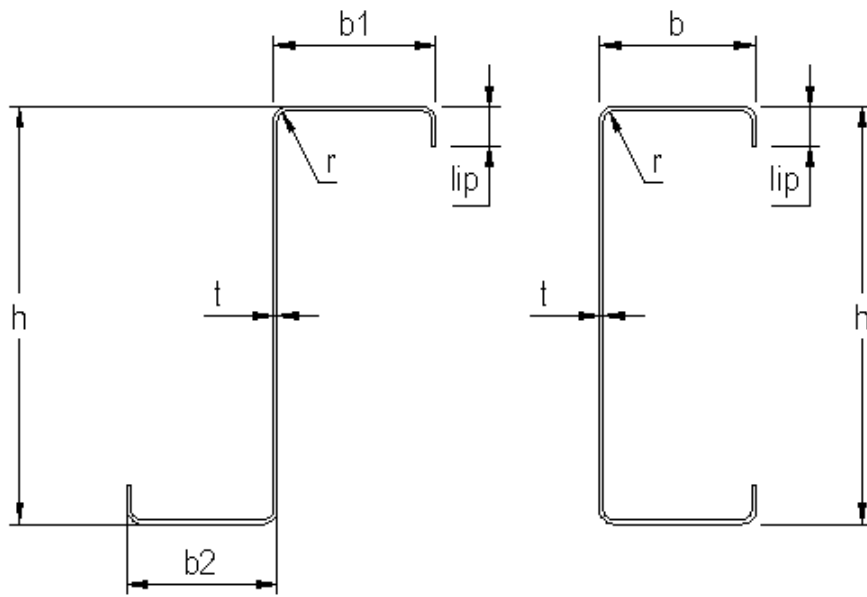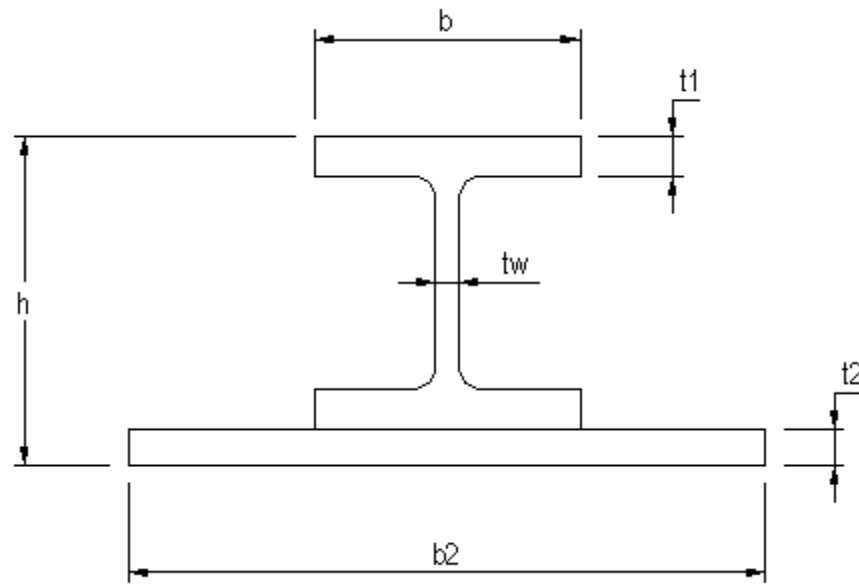*Note: If root radius = 0, it is assumed flange is a plate.*

T SHAPE AND CHANNEL

Notes: Tapper flange of T Shape and Channel Shape are similar to I Shape
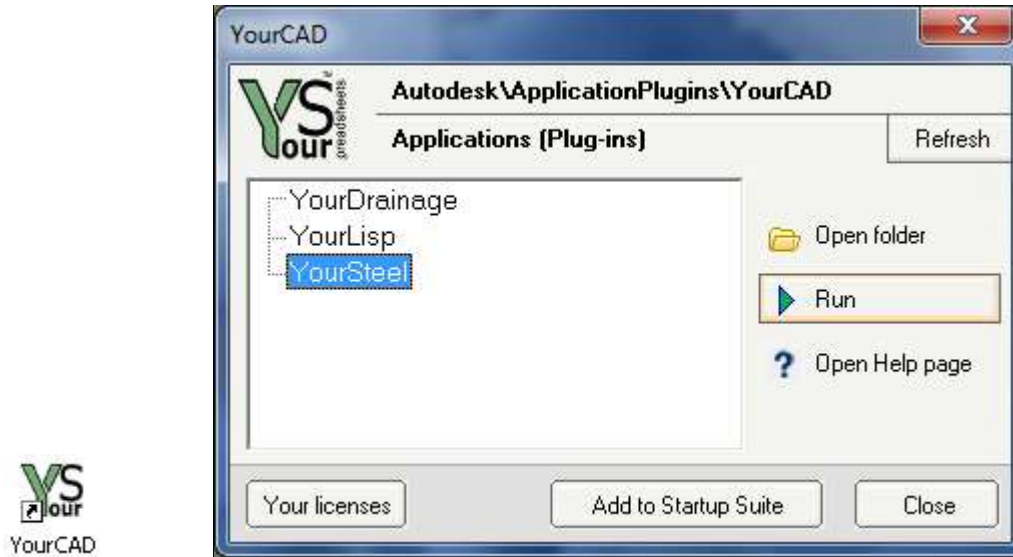
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ANGLE, BOX and PIPE

COLD FORM Z AND COLD FORM CHANNEL

SFB SHAPE

YourCAD™ control panel

In Windows, open YourCAD™ via the shortcut created on Desktop (shown below), or shortcut in Start Menu\All Programs\YourCAD folder. You can run YourSteel™ (or other plug-ins in the package) via this window by click Run command button.

YourCAD Window

StartUp issue (For AutoCAD 2011 and earlier version only)

The software installation will only add StartUp lisp to the current user's profile of each AutoCAD® version (the latest one you've used). There for if you login as other Window User Account, you need to open YourCAD™ from window desktop, click "AutoCAD Startup Suite" to activate YourCAD™ start up lisp again (provide AutoCAD is not currently open).

Sometime you need to add YourCAD™ StartUp lisp manually following these steps:

- Enter APPLOAD command at Command line,
- Browse to YourCAD™ program folder (in your Program Files folder e.g. C:\Program Files),
- Choose StartUp.lsp file and click Load,
- Click on Content of StartUp suite (at the bottom right corner),
- Click Add to browse to YourCAD™ program folder,
- Close the Load/Unload Application dialog.

Note: You have to do this once only for each user's profile.

Version History

1.5.0

Enabled working on all AutoCAD platforms: Architecture, Civil3D, Mechanic etc.

New interface and new ribbons.

New and upgraded commands to edit Steel Frames more efficiently, especially Convert and Change Frames Visibilities commands.

Wipeout implemented to Steel Frame block.

AISC sections in metric unit updated. Folder name renamed to US Metric 1.5

UK sections updated to advance sections. Folder name renamed to UK 1.5

1.2.2

Fix issue when working with AutoCAD language package other than English.
Fix issue when working with annotative dimstyle.
Quick start page introduced. Enable help functions associated with F1 key.
Frame tags can be shown or hidden.
Dimscale control text height can be edit directly within the dialog box.
Sections list auto-grouped. Maximum 5 items in group due to list height limit.
Updated AISC sections database in imperial unit.
New ribbon interface.
Support Win64 and Win32.

1.1

First release. Support Win 32 only.